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circumstances and the equipment in use.

- (C) Applying the Navigational Rules, and other factors to consider when determining changes of course or speed of a vessel to prevent collisions on the basis of radar observation.
- (D) Use of radar in maintaining situational awareness.
- (4) Radar Observer (Unlimited: Renewal). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the following subjects:
- (i) Interpretation and analysis of radar information:
- (A) Radar navigation (including visual techniques)—determining positions, and detecting changes in the relative motion, of other vessels.
- (B) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.
- (C) Determining the course and speed of another vessel.
- (D) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.
- (E) Detecting changes of course or speed of another vessel after its initial course and speed have been established.
- (F) Applying the Navigational Rules, and other factors to consider when determining changes of course or speed of a vessel to prevent collisions on the basis of radar observation.
- (G) Use of radar in maintaining situational awareness.
- (ii) Plotting (by any graphically-correct method):
- (A) Principles and methods of plotting relative and true motion.
  - (B) Practical-plotting problems.
- (5) Radar Observer (Inland Waters and GIWW: Renewal). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the interpretation and analysis of radar information, including:
- (i) Radar navigation (including visual techniques—determining positions, and detecting changes in the relative motion, of other vessels.
- (ii) Collision-avoidance, including visual techniques, appropriate to the

circumstances and the equipment in use.

- (iii) Determining the course and speed of another vessel.
- (iv) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.
- (v) Detecting changes of course or speed of another vessel after its initial course and speed have been established.
- (vi) Applying the Navigational Rules, and other factors to consider when determining changes of course or speed of a vessel to prevent collisions on the basis of radar observation.
- (vii) Use of radar in maintaining situational awareness.
- (6) Radar Observer (Rivers: Renewal). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the interpretation and analysis of radar information, including:
- (i) Radar navigation (including visual techniques)—determining positions, and detecting changes in the relative motion, of other vessels.
- (ii) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use
- (iii) Applying the Navigational Rules, and other factors to consider when determining changes of course or speed of a vessel to prevent collisions on the basis of radar observation.
- (iv) Use of radar in maintaining situational awareness.

[CGD 94-041, 62 FR 11303, Mar. 11, 1997]

## §10.306 [Reserved]

## § 10.307 Training schools with approved radar observer courses.

The Commanding Officer, National Maritime Center, NMC-42, 100 Forbes Drive, Martinsburg WV 25404 maintains the list of approved schools and specific courses. This information is available upon request by writing the aforementioned address or calling (202) 493-

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1025 (also available on the internet at: http://www.uscg.mil/STCW//).

[CGD 81-059, 52 FR 38623, Oct. 16, 1987, as amended at 54 FR 132, Jan. 4, 1989; CGD 95-072, 60 FR 50460, Sept. 29, 1995; USCG-1998-4442, 63 FR 52189, Sept. 30, 1998; USCG-2004-18884, 69 FR 58342, Sept. 30, 2004; USCG-2007-29018, 72 FR 53964, Sept. 21, 2007; USCG-2008-0906, 73 FR 56508, Sept. 29, 2008]

## § 10.309 Coast Guard-accepted training other than approved courses.

- (a) When the training and assessment of competence required by this part are not subject to Coast Guard approval under \$10.302, but are used to qualify to hold an STCW certificate or endorsement for service on or after February 1, 2002, such training and assessment must meet the following requirements:
- (1) The training and assessment must have written, clearly defined objectives that emphasize specific knowledge, skills, and abilities, and that include criteria to be used in establishing a student's successful achievement of the training objectives.
- (2) The training must be set out in a written syllabus that conforms to a Coast Guard-accepted outline for such training and includes—
- (i) The sequence of subjects to be covered;
- (ii) The number of hours to be devoted to instruction in relevant areas of knowledge;
- (iii) The identity and professional qualifications of the instructor(s) to be conducting the training or providing instruction:
- (iv) The identification of other media or facilities to be used in conducting training; and
- (v) Measurements at appropriate intervals of each candidate's progress toward acquisition of the specific knowledge, skills, and abilities stated in the training objectives.
- (3) Except as provided in paragraph (a)(4) of this section, documentary evidence must be readily available to establish that all instructors—
- (i) Have experience, training, or instruction in effective instructional techniques;
- (ii) Are qualified in the task for which the training is being conducted; and
- (iii) Hold the level of license, endorsement, or other professional cre-

dential required of those who would apply on board a vessel the relevant level of knowledge, skills, and abilities described in the training objectives.

- (4) Neither a specialist in a particular field of nonmaritime education, such as mathematics or first aid, nor a person with at least 3 years of service as a member of the Armed Forces of the United States, specializing in the field in which he or she is to conduct training, need hold a maritime license or document to conduct training in that field.
- (5) A simulator may be used in training if—
- (i) The simulator meets applicable performance standards;
- (ii) The instructor has gained practical operational experience on the particular type of simulator being used; and
- (iii) The instructor has received appropriate guidance in instructional techniques involving the use of simulators.
- (6) Essential equipment and instructional materials must afford all students adequate opportunity to participate in exercises and acquire practice in performing required skills.
- (7) A process for routinely assessing the effectiveness of the instructors, including the use of confidential evaluations by students, is in place.
- (8) Documentary evidence is readily available to establish that any evaluation of whether a student is competent in accordance with standards, methods, and criteria set out in part A of the STCW Code is conducted by a designated examiner who has experience, training, or instruction in assessment techniques.
- (9) Records of the student's performance are maintained for at least 1 year by the offeror of the training and assessment.
- (10) To ensure that the training is meeting its objectives, and the requirements of paragraphs (a)(1) through (9) of this section, the offeror must either—
- (i) Be regulated as a maritime academy or marine academy pursuant to 46 CFR part 310; or
- (ii) Monitor the training in accordance with a Coast Guard-accepted QSS,